rats
... as pets

PET BOOKS HANDY-ORDER FORM

These TFH books are available (with the exception of those preceded by a star) at your local pet supplier. If ordered from the publisher add 25c for postage and write to TFH BOOKS, P. O. Box 33, Jersey City, N. J. 07303. Don't forget to include your zip code number!

TROPICAL FISH BOOKS

Qty.	Style No.		Retail Price
	E-726	Angelfish in color	.50
	F-5	Angelfish	.35
	PS-601	Aquarium, All about	$2.00
	F-10	Aquarium, Begin. the	.35
	F-16	Aquarium, Decorate	.35
	PS-632	Aquarium, Educ.	$1.50
	H-930	Aquarium Fishes, Breed	$9.95
	M-516	Aqua. Fish Diseases	$1.00
	F-6	Aquarium Plants	.35
	PR-001	Aquarium in color	.50
	PR-002	Aq. Plants in color	.50
	F-7	Aq. Repair Manual	.35
	F-52	Aquarium, Setting Up	.35
	E-721	Aq. Water Chemistry	.50
	F-8	Arg. Pearl Fish	.35
	F-9	Barbs	.35
	F-1	Barbs, African	.50
	E-701	Bettas, Beautiful	.50
	PR-004	Breed. Fishes in color	.50
	F-13	Catfishes	.35
	PS-650	Catfishes, Advanced	$2.00
	F-14	Cichlids	.35
	F-3	Cichlids, African	.50
	F-19	Cichlids, Dwarf	.35
	F-15	Danios	.35
	F-17	Discus in color	.50
	F-18	Diseases Trop. Fish	.35
	F-11	Egglayers, Breeding	.35
	E-706	Egglayers, Colorful	.50
	F-45	Exotic Binder	$4.95
	F-50	Exotic Comp. Index	$1.00
	H-907	Exotic Fish Hardcr.	$9.95
	H-907L	Exotic Fish Loose	$20.00
	F-42	Exotic Supp. No. 1	$1.00
	F-43	Exotic Supp. No. 2	$1.00
	F-44	Exotic Supp. No. 3	$1.00
	F-49	Exotic Supp. No. 4	$1.00
	F-51	Exotic Supp. No. 5	$1.00
	F-54	Exotic Supp. No. 6	$1.00
	F-55	Exotic Supp. No. 7	$1.00
	F-41	Fish Post Cards	$1.25
	F-53	Fishes For Comm. Tank	.35
	M-513	Garden Pools	$1.00
	F-21	Goldfish as Pets	.35
	E-703	Goldfish, Beautiful	.50
	PR-008	Goldfish in color	.50
	H-909	Goldfish in Home	$3.95
	H-919	Goldfish Pools, Water Lilies & Trop. Fishes	$7.95
	M-504	Goldfish, Start	$1.00
	F-22	Gouramis	.35
	PR-023	Gouramis in Color	.50
	M-505	Guppies	$1.00
	PS-603	Guppies, All about	$2.00
	F-23	Guppies as Pets	.35
	F-20	Guppies, Fancy	.35
	M-526	Guppies, Adv. Hobbyist	$1.50
	E-712	Guppies, Hybrid	.50
	PR-010	Guppy in color	.50
	PS-642	Innes—Ex. Aquar. Fish	$2.50
	H-910	Keep Trop. Fish HC	$4.95
	H-910S	Keep Trop. Fishes	$3.95
	F-24	Live Foods	.35
	F-12	Livebearers, Breed	.35
	E-707	Livebearers, Clrfl.	.50
	M-519	Marine Aq. Keep. Guide	$1.00
	AP-923	Marine Tropicals	$3.95
	PR-025	Mollies in Color	.50

TROPICAL FISH BOOKS

Qty.	Style No.		Retail Price
	F-26	Panchax Group	.35
	F-27	Pencil Fish	.35
	E-722	Piranhas	.50
	M-534	Platies, Fancy	$1.00
	F-28	Platies as Pets	.35
	E-713	Platies and Moons	.50
	PS-651	Pond Life	$2.00
	F-29	Rasboras	.35
	H-914	Saltwater Aquarium	$7.95
	E-715	Saltwater Fishes	.50
	F-30	Seahorses	.35
	AP-5310	Seahorses, Keeping	.75
	F-31	Siamese Fighting	.35
	M-536	Siamese Fightingfish	$1.00
	PS-645	Successful Aquarium	$1.50
	F-32	Swordtails	.35
	PS-655	Swordtails, Adv. Hob.	$1.50
	E-708	Swordtail, Colorful	.50
	F-33	Tetras Book No. 1	.35
	F-34	Tetras Book No. 2	.35
	E-709	Tetras, Colorful	.50
	E-717	Tetras, Tiny	.50
	H-915	Tropical Fish	$1.50
	F-35	Tropical Fish Pets	.35
	F-46	TFH Binder	$3.95
	PS-602	Tropical Fish Breed	$2.00
	H-904	Trop. Fish, Dict. of	$7.95
	H-905	Trop. Fish, Ency. of	$8.95
	M-510	Trop. Fish, Start	$1.00
	F-36	Trop. Fish Chart 1	$1.98
	F-37	Trop. Fish Chart 2	$1.98
	F-38	Trop. Fish Chart 3	$1.98
	E-711	Trop. Fish Guide	.50
	E-718	Trop. Fish Primer	.50
	M-523	Tropicals, Begin with	$1.00
	H-929	Water Plants Ency.	$9.95

CAT BOOKS

Qty.	Style No.		Retail Price
	AP-4800	ABC Cat Diseases	$1.00
	AP-4600	Cat Genetics	$4.50
	M-503	Cats	$1.00
	E-704	Kitten, Charming	.50
	C-201	Kittens as Pets	.35
	PR-012	Kitten in color	.50
	AP-4900	Kitty Cat	.50
	M-514	Ocelots & Margays	$1.00
	PS-649	Ocelot in your Home	$3.95
	M-507	Persian Cats	$1.00
	C-202	Persian Cats Pets	.35
	H-918	Persian Cats, Lghrs.	$5.95
	H-920	Shorthaired Cats	$5.95
	AP-4300	Siamese Cat Book	$4.00
	M-509	Siamese Cats	$1.00
	C-203	Siamese Cats Pets	.35
	PS-617	Siamese Cat, Th. is	$4.95
	AP-4902	Cat Training	$1.00

ANIMAL BOOKS

Qty.	Style No.		
	A-301	Alligators as Pets	.35
	A-302	Ants as Pets	.35
	A-303	Bunnies as Pets	.35
	A-304	Chameleons	.35
	A-305	Chicks as Pets	.35
	A-306	Chipmunks	.35
	A-307	Ducks	.35
	A-308	Frogs & Toads	.35

ANIMAL BOOKS

Qty.	Style No.		
	M-518	Geckos	$1.00
	A-324	Gerbils As Pets	.35
	E-727	Gerbils, Begin with	.50
	E-725	Gerbils in color	.50
	M-524	Gerbils, Raise & Train	$1.00
	E-720	Guinea Pig, Playful	.50
	A-309	Guinea Pigs No. 1	.35
	PR-009	Guinea Pig in color	.50
	PS-624	Hamsters, All about	.75
	A-310	Hamsters as Pets	.35
	AP-7200	Hamster Guide	$2.00
	A-311	Hamsters No. 2	.35
	E-714	Hamsters, Playful	.50
	PR-011	Hamster in color	.50
	M-508	Hamsters, Raise	$1.00
	A-321	Horned Toads Pets	.35
	A-322	Iguanas as Pets	.35
	M-514	Margays, Ocelots	$1.00
	A-312	Mice	.35
	A-323	Mice, Waltzing	.35
	AP-8052	Monkey Business	$1.00
	A-313	Monkeys	.35
	AP-924	Monkeys as Pets	$3.95
	AP-7303	Mouse, Modern Amer.	.75
	A-314	Ponies as Pets	.35
	E-724	Rabbits, Charming	.50
	AP-7500	Raccoon Family Pets	$1.00
	A-319	Rats as Pets	.35
	H-928	Reptiles & Amphibians	$7.95
	A-315	Salamanders, Newts	.35
	A-316	Skunks	.35
	M-527	Skunks, Raise	$1.00
	A-317	Snakes	.35
	AP-925	Snakes as Pets	$2.95
	A-320	Terrarium, Begin	.35
	M-511	Terrarium, Your	$1.00
	M-515	Turtles	$1.00
	A-318	Turtles as Pets	.35
	H-922	Turtles of World	$9.95
	E-719	Turtles, Playful	.50
	PR-016	Turtle in color	.50

BIRD BOOKS

Qty.	Style No.		Retail Price
	M-501	Backyard Birds	$1.00
	M-521	B'yard Birds (Cal & PN)	$1.00
	H-901	Budgerigar Hdbook	$9.95
	M-502	Budgerigars	$1.00
	AP-400	Budgerigar as Pet	$2.50
	AP-1880	Budgerigar, Feeding	$1.00
	E-702	Budgie, Beautiful	.50
	PR-003	Budgie in color	.50
	AP-401	Budgie, The Talking	.50
	AP-402	Budgie, Your Pet	.25
	B-100	Budgies as Pets	.35
	AP-690	Budgies, Dev. Color	$2.00
	AP-9499	Budgies (Poyke)	$1.00
	M-520	Cage Birds	$1.00
	B-101	Canaries as Pets	.35
	AP-270	Canaries, Plea. & Profit	$1.00
	PR-005	Canary in color	.50
	E-716	Canary, Singing	.50
	AP-200	Canary, Your Pet	.50
	PS-628	Cardinal, Lvbd. Bunt.	$2.00
	AP-1200	Cockatiel, Your Pet	.50
	M-517	Cockatiels	$1.00
	B-102	Cockatiels	.35
	AP-1280	Cockatiel, Exp. with	$3.00
	PS-630	Finches	$2.00
	H-908	Finch & Sftbd. Bird	$9.95

t.f.h. Publications
245 CORNELISON AVE., JERSEY CITY, N. J. 07302

$2.50

RATS ... as pets

by Dr. Herbert Richards

Who says girls are afraid of rats and mice? This baby rat is a favorite.

Published by T.F.H. Publications T.F.H. Building, 245 Cornelison Avenue, Jersey City, N. J. 07302. Distributed in the British Empire by T.F.H. Publications (London) Ltd., 13 Nutley Lane, Reigate, Surrey, England. In Canada by Clarke, Irwin & Company Ltd., Clarwin House, 791 St. Clair Avenue West, Toronto 10, Ontario, Canada. Printed in the U.S.A. by the lithograph process by T.F.H. Lithograph Corp., Jersey City, N. J. 07302.

© Copyright 1961 by T.F.H. Publications

Photography by Louise Van der Meid with the cooperation of Lee Brentchel, Palos Verdes Pet Shop; Mr. and Mrs. Darryl Keener of King's Pet Shop; Andy's Pet Shop; and models Carol Ann Gwardyak and Jill Keener.

RATS AS PETS

CONTENTS

Rats as pets ---------- 4
The Care of the Domesticated Rat 5
The Cage ---------- 6
Feeding your Pet Rat ----- 9
How to Breed your Pet Rat ----- 11
How to Sex your Rat ---- 15
Taming Your Rats -------- 17
Training your Pet Rats - 19
Diseases of Rats -------- 20
Symptoms of a Sick Rat - 22

Cute???? My little model friend was simply charmed by this baby rat . . . and the rat was charmed with her ears, too!!!! Baby rats are curious and affectionate.

RATS AS PETS

As unbelievable as it may sound, rats are one of the best pets available for children of all ages. Not only have many interesting and beautiful color varieties been developed over the years, but many strains and the inbreeding of certain qualities have made the rat the world's most practical rodent.

The great wealth of information that we have about the rat stems from the fact that the rat has been used for experimental work for the past 100 years . . . and possibly longer. Every type of experiment was based upon rats being available and because of this many scientific papers were written about the rodent.

Rats as pets is not a new switch. As a biology student I spent many hours caring for thousands of rats at the University. I would often get a particular nicely marked rat and make a pet of it. This was also true of other laboratory assistants and we often gave them to school teachers to be used as teaching aids in high school. Many high school children earn addi-

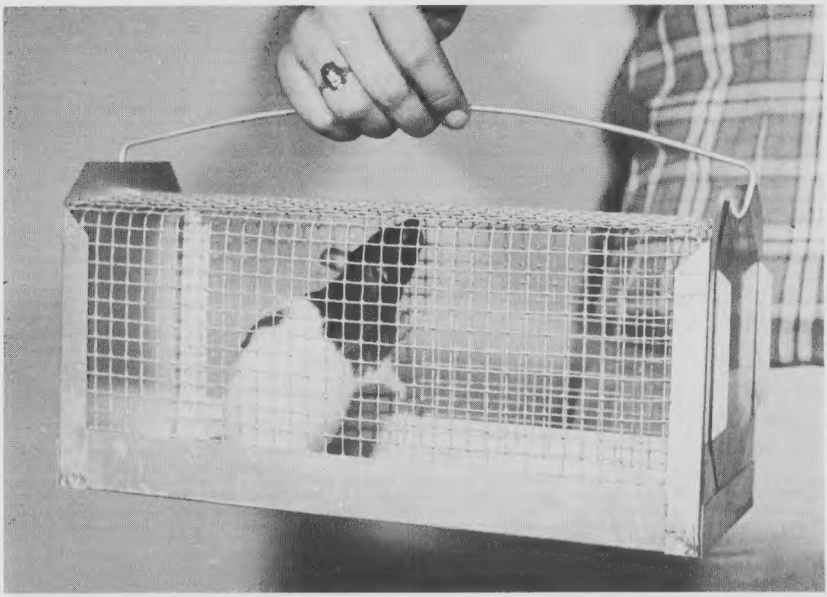
tional income by breeding particular strains of rats and if your interest lies in breeding rats for profit, contact your petshop and make arrangements. There always seems to be a demand for hand-tamed rats. The demand for experimental animals varies with the variety of rat.

Kept under sanitary conditions rats are clean, odorless, safe pets. They are to be highly recommended as pets.

THE CARE OF THE DOMESTICATED RAT

There are certain essential requirements for rats, as well as any other rodent you might care to keep. Certainly, you must be aware of the fact that the domesticated rat is related to the wild rat. Through domestication, the rat has become very clean

Rats are fun for young and old alike. This was not a posed photo. The author took it in Andy's Pet Shop. The young boy bought the rat with his Granny. The lady on the right couldn't believe it was so tame and playful!!!

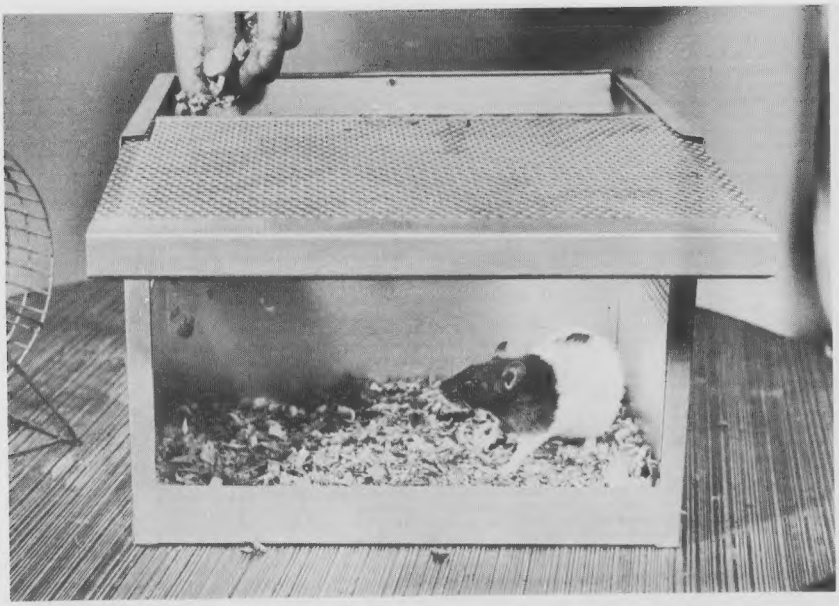


This is a good rat carrier cage. It is also helpful in storing your rat while you are preparing the cage or cleaning it.

and doesn't normally carry any of the diseases that the wild rat might carry, but there is always the danger that a wild rat might be attracted to the cage of the domesticated rat and pass on some of the fleas, ticks, or other parasites which plague the wild rat. The only way to effectively combat the possibility of a wild rat getting close to your pet rats is to keep the domesticated rat in absolutely clean cages and away from the usual habitat of the wild rat. Unless your basement is clean, don't keep your rats in the cellar. Try to keep your pet rat in the cleanest place possible.

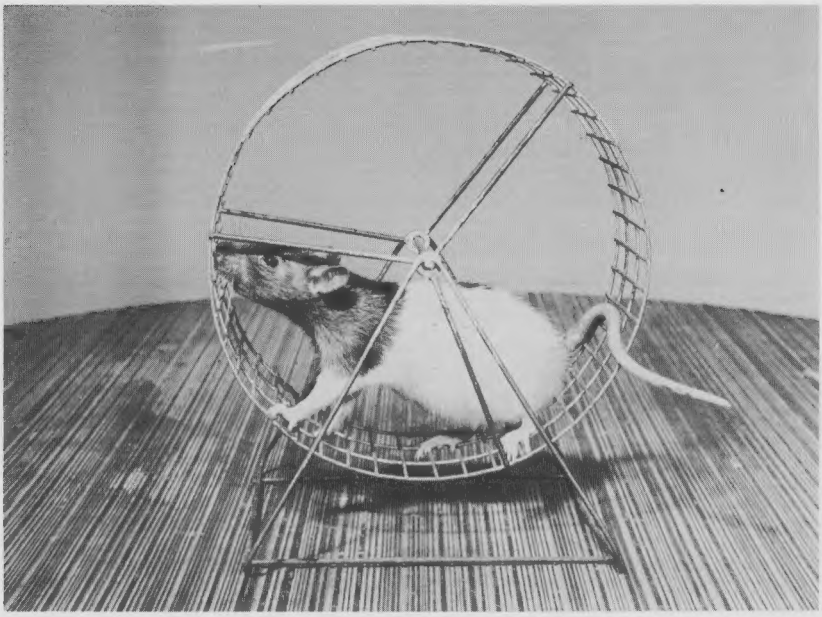
The Cage

The cage of the domesticated rat should be as large as possible, at least twice as long as a rat's body and as wide. The top should be screened, preferably with a fine stainless steel mesh which is easily cleaned and sterilized. One side of the cage should be glass and one side should have small holes to permit proper ventilation. The bottom should be covered with cedar shavings to keep down the odor and to maintain as clean a bedding as possible. Cedar shavings absorb the rat urine and



To keep your cage always smelling sweet, add a layer of cedar shavings every day to your rat's cage.

This is a relatively inexpensive rat cage completely equipped with an exercise wheel.



Rats like to use exercise wheels, so get one for your rat . . . and be sure that his cage is large enough for him and the wheel.

keep the cage odorless. Above all else, cleanliness is necessary to keep your rat healthy.

Change the cedar shavings once a week and if you wish to be very sanitary, you can add a handful of cedar shavings every day to supplement the absorbency of the older shavings.

Every month take the rat out of the cage and wash the cage thoroughly in hot, soapy water to which a little Lysol or other disinfectant has been added. You can also spray the cage with a cat flea and tick killer to insure that any parasites which you missed will be destroyed.

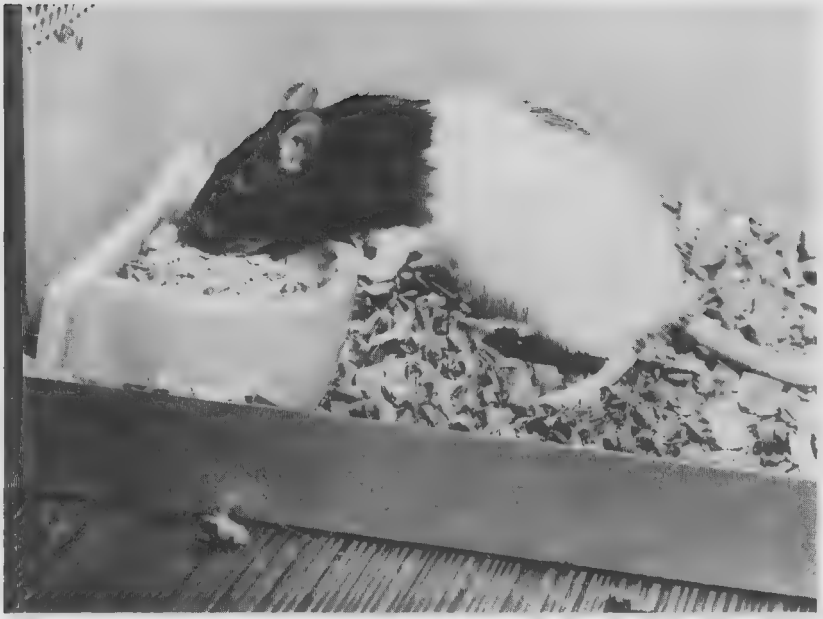
Food and water containers should be cleaned every few days. A gravity feed water bottle, the same as usually sold for hamsters, is ideal for rats. Generally speaking, the same food, cages, sprays, exercise wheels and the like, which are manufactured for hamsters, are suitable for rats. Interestingly enough, pet rats do not gnaw as much as wild rats or hamsters! Thus you can use wooden cages, though they are the least desirable. Large hamster cages, bird cages and aquariums are the best homes for your pet rat.

Feeding Your Pet Rat

All living organisms need certain basic requirements, and fortunately for the rat fancier, so much is known about the diets of rats (because they have been used for experimental purposes for so long), that we can offer a very inexpensive, completely balanced diet. Of course, it is foolish for someone with one or two pets to prepare his own diet when hamster food is so cheap and easy to buy, but perhaps the person who wants to breed his rat, or do dietary experiments, can profit from the researches of others on diets for rats.

We know there are somewhere near 30 different amino acids which act as building blocks for proteins. Rats only require 9 of these. These 9 can be supplied if you feed not only vegetable protein matter, but a little animal protein matter as

This gravity type water bottle is ideal for rats. It is usually sold for hamsters.



Use a cage cup such as this one for food. It is NOT for water as the rat will spill or splash the water all over the cage. Change the food daily and clean the cup as often as possible.

well. For example, milk protein is 2½ times as valuable a supply of protein as grain! The best all-around rat diet is fish meal, powdered milk, shrimp meal, yeast, soy meal and grain. Hamster foods do not contain all of these essentials, but you can supplement the hamster diet by going into your pet shop and buying some of the tropical fish food supplements which are sold as "Shrimp Meal." Certain high quality fish foods sold for tropical fish contain fish meal, shrimp meal, etc. Buy a can of tropical fish food (read the label of contents first) and feed it once a week to your rat along with the grain from the hamster food.

Rats are especially prone to vitamin deficiencies and you are recommended to get some dog or cat vitamin supplements and either feed a drop each week directly into the mouth of your pet rat, or soak some of the seed in it before feeding. There are available on the market (in petshops) certain "vitamin and mineral supplements," these should be added daily to your rat's diet in order to keep him healthy. This is especially necessary if you want to breed rats.

HOW TO BREED YOUR PET RAT

Rats need a mother and a father. This is a simple statement but it is a necessary one for so many people think that female rats have babies all by themselves. The actual mating act, or mounting, takes place from 12 to 72 times within a period of 10 to 18 hours. The number of mountings varies with the age of the rats, the temperature and the amount of disturbance the breeding rats experience. The breeding cycle lasts from 3 to 6 days and if the rat isn't bred during the 10-18 hour heat period in that cycle, she can be bred on the next cycle.

If impregnation takes place, the vaginal tract of the female rat swells shut from 3 to 8 hours after mating and it stays closed for about a day. Pregnancy lasts for about three weeks, perhaps a few days longer, depending upon temperature and certain other factors such as the race of rat, its physical condition, age, health, etc. Each mother rat will give birth to 1 to 24 babies, with an average of 10 to 12. The most productive mothers are those between the ages of three months and 10 months. The baby rats weigh much less than one ounce at birth

If you want to keep your pet rat in top shape, feed a vitamin and mineral supplement from time to time. Usually the rat will lap the drop from the end of the dropper.

As the female rat begins to get filled out, change the diet slightly by adding more protein in the form of tropical fish foods, rich in shrimp and fish meals.

Rats are surprisingly clean animals. They wash themselves carefully after eating.

(usually they weigh less than ¼ ounce). It is not uncommon for rats to breed 8 times a year with production of 100 babies in all.

Sexual maturity of the babies is reached about 60 days after birth, though they should not be bred until they are 70-75 days old. When a female rat is pregnant and starts developing milk, it has been found that she reaches her maximum milk production the 10th day after bearing young and the milk production decreases gradually until the mother dries up about the 28th day. From the 12th to the 14th day, the baby rats will start taking solid foods. The general timetable of a litter is as follows:

Opening the ears	2½-3½ days
Teeth breaking through	8-10 days
Young find their way to mother	9-10 days
Opening the eyes	14-17 days
Breasts and sexual organs covered with hair	16 days
Breakthrough of first molars	19 days
Breakthrough of second molars	21 days
Breakthrough of third molars	35 days
Migration of testicles	15-51 days
Opening of vagina	15-72 days
Average life span	1,000 days
Maximum life span	2,000 days

From birth, the males grow much faster than females. This acceleration of growth is especially noticeable after the 14th day of life. Checking your rat's development by weight is important so you can be sure that your rat is healthy.

At an age of 10 days	¾ oz.
At an age of 20 days	1⅜ to 1¾ oz.
At an age of 30 days	2⅛ to 3⅛ oz.
At an age of 40 days	3⅛ to 4⅝ oz.
At an age of 50 days	4¼ to 5½ oz.
At an age of 60 days	5 to 6⅜ oz.
At an age of 70 days	5¾ to 7¼ oz.
At an age of 80 days	6¼ to 8¼ oz.
At an age of 90 days	7 to 9¼ oz.

These figures are based upon quick-growing strains (most pet rats are quick-growing strains) in which the number of

A nest of 8 rats all intermingled!!! They keep each other warm.

young have been limited to 8 babies per litter. If the litter is smaller, the young will be bigger; if the litter is larger, the young will be smaller. The lower weights are for the females; the higher weights are for the males.

During actual breeding, only put together brother and sister, unless you are just starting and have only one rat. The family method of breeding is fine with rats and you will find that males are very commonly sold as pets because the females are kept for breeding. One male can easily service 10 females. It is economical, if you are interested in breeding for profit, to keep one male for every ten females. When a female shows the obvious signs of pregnancy, you can move her to a private breeding cage where she will be able to bring up her youngsters without being bothered by the other rats.

Scientists who breed rats for experimental purposes have a definite routine, which is as follows: One male is left with 6 females from Tuesday night to Thursday morning. The pregnant specimens are removed to separate breeding cages on the Monday of the last week of their pregnancy, or the beginning of the third week of their pregnancy. If a few rats are not pregnant, they are left with the male and the number of new

females is increased so that again their number is 6 to 1 with the same stud rat. This cycle goes on for 12 weeks. Females which have not become pregnant during any 12 week cycle are to be discarded as breeders as they are probably sterile.

The young are reduced to number 8 in a litter and they are weaned when they are 14 to 16 days old and weighing between 1⅛ and 1¼ oz. Mothers which have three litters each under 8 babies, should be discarded as breeders. If you have a mother rat with only a few babies, you can place other babies of the same age under her as her litter. These other babies can come from mothers who have had more than 8 babies. Rats generally are good foster parents.

How To Sex Your Pet Rats

It is a good idea to separate the sexes immediately after weaning. This is not always easy at this early age for the sexual organs are not completely formed. The best way is to check

Don't lift your pet rat by the tail. It doesn't hurt the rat, but they are harder to handle especially if you want to put them into a small cage hole.

the litter against each other in terms of the distance between the anus and the genital papilla. In males the distance is about 50% greater. In three week old rats, the distance between the anus and the genital papilla is ½" for the male and only ⅜" for the female. At 6 weeks of age the distance is ⅞" for the male and ½" for the female. As a general rule, it is best not to disturb the mother rat during her pregnancy. Feed her a good, substantial diet with lots of tropical fish food supplementing her grain. Give her as much water as she wants and always have clean water available. When she gives birth she will eat all the after-birth. She will also probably eat her dead youngsters if there are any.

From time to time, a mother rat will seemingly kill her babies and begin to eat them. There is no explanation for this. Parakeets, canaries, pigeons, dogs, cats, hamsters and even higher animals often are responsible for similar behavior and there doesn't seem to be any obvious reason for it. If your mother rat does this twice in a row, stop breeding her.

This is the proper method of picking up your pet rat. Of course your rat will be snuggled into your hand while you carry it; you don't carry the rat about by the scruff of the neck.

Rats will eat anything, including lettuce and other vegetables. Make sure they get a balanced diet.

TAMING YOUR RATS

Adult rats are much harder to tame than baby rats. If your mother rat was tame then it is OK to handle her and the young rats after they have opened their eyes. The more you handle them the more tame they will be. Rats become very friendly and they are always a lot of fun. As a youngster, I had unending pleasure in putting my tame rats down the backs of my female classmates . . . until I picked on the wrong girl. She took my rat home and refused to give it back. It served me right!!

Many children are afraid of rats . . . almost as much as they are afraid of snakes. Yet snakes and rats are not uncommon pets! It is good training to be afraid of any strange animal, for all animals have teeth and they can bite. Your best bet is to buy or sell only hand-tamed rats and don't buy one unless the person who is selling the rat will handle it and insure you that the rat is tame (this is sound advice for any pet). Baby rats, of course, can always be tamed, so there is little

You can train and tame your rat by hand-feeding him.

Pet your rat gently to tame it. Don't handle your rat when there are dogs or cats around, or strangers of any kind for that matter. Wait until you and your pet rat are very familiar with each other before you introduce him to foreigners!

These are trained rats which will walk on their back feet and use their tails for balance. They are beautifully marked.

danger in buying baby rats. Then, too, once a rat is tamed, he must be constantly handled or he won't be tame for long, so encourage your children, or your friends, to handle the rat. A rat bite from a domesticated rat which was tamed is a very rare occurrence, but treat it with disinfectant immediately and should it become infected see your doctor.

TRAINING YOUR PET RAT

Not only can rats be tamed, they can also be trained. Training is accomplished by keeping your rat hungry for a day, and then begin the training by hand-feeding him bits of grain. Gradually you can get the rat to stand on his back legs to get the food which you are holding just out of his reach. After this type of training you can build a maze and the animal will eventually find his way through the maze, no matter how complicated, to the food. After finding his way a few dozen times, he will do it unerringly! This type of stunt always makes good entertainment for your friends.

After you have finished training your rat, always be sure to put him back in the cage. Never let your rat go about free or

Cats are natural enemies of rats (that's why cats are so popular). A rat which has been tamed won't be afraid of a cat, so protect your rat against cats.

he will scamper away and never come back. Remember, too, that cats are natural enemies to rats, and your pet rat probably doesn't know enough to be afraid of the cat . . . so be careful or you will have your cat killing your pet rat.

DISEASES OF RATS

As was previously mentioned, domesticated rats are as clean as any other domesticated animal, but there is just as much chance of them getting a disease from a wild rat as there is of your dog getting rabies or distemper from a wild dog!

Though this section will deal primarily with what makes your rat sick, we should discuss for a moment the diseases your rat (or any rat for that matter) can carry to you! Usually these diseases are lumped together in what are called "Rat Bite Diseases." Scientists have defined about 75 animal diseases which can be transmitted to humans. Only a few are carried by the rat and transmitted through a bite. These diseases are the same (or nearly so) as that carried by the bite of a dog or cat, and are very similar to "Cat Scratch Diseases."

As with most animals, rats can be carriers of a disease

Mother rat with her family of 8 babies. This is the ideal family size.

Use a good cat flea powder to keep your rat free of fleas and ticks. Rub the powder into the fur. Some people say that dog flea powder is too strong.

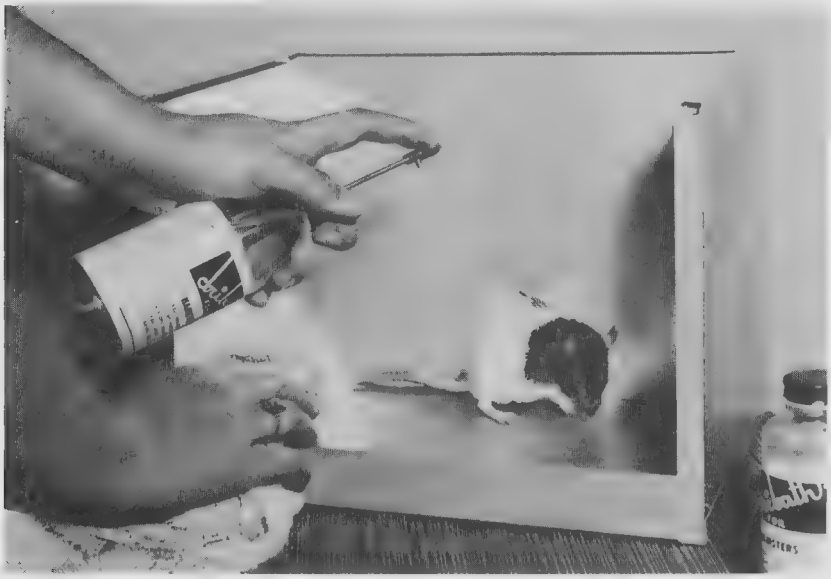
without showing any symptoms of it themselves, thus every rat bite should be immediately painted with iodine. Should any after-effects develop, be sure to see your medical doctor. For First Aid, take 500 mg. of Tetracycline and 250 mg. additional every 6 hours until you can check with a doctor. Be especially attentive to high body temperatures, chills, vomiting, blood in urine, muscle pains, abdominal pains and general depression.

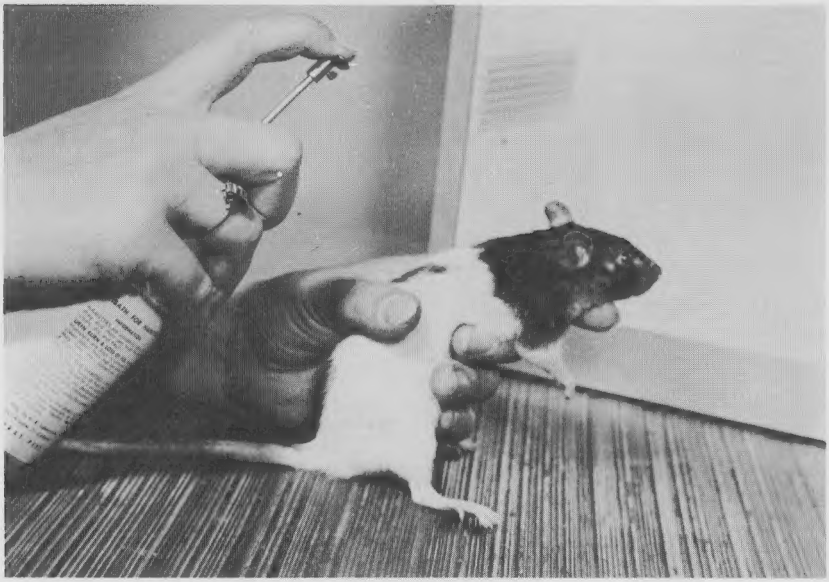
I have handled rats in the laboratory for 14 years and I have never known anyone to become ill from a rat bite. But then, too, I have never known anyone who was bitten by a rabid dog. "An ounce of prevention is worth a pound of cure" and the above information is to be taken in the same light as you would read a "Life Raft Procedures" chart in an airplane as you fly over the ocean.

Symptoms of a Sick Rat

If the rat is properly fed and maintained in a proper sanitary environment, you can have rats all your life without once seeing a sick rat. Throughout history man has tried to kill rats with fire, drowning, poison, traps and diseases, but the rat has

Spray both rat and cage after you have cleaned and sterilized it. Use a hamster spray or cat spray, both are excellent.





If your rat gets dirty from urine or food, spray the rat with a bird spray and wipe the rat down with a clean cloth. Their fur is very easy to keep shiney and clean.

prevailed. It is a hardy, strong animal and with minimum effort it will live to its full 3 years.

Should your rat show any of the following symptoms, you should start looking for trouble: lustreless fur; food refusal; running with arched back; squatting position maintained for a long time; panting movements of the flanks; wheezing; growing thin; eye diseases; swellings at the feet and tail; bent tails; protrusion of one of the spinal vertebrae; diarrhea; spinning when lifted by the tail; loss of hair; wounds and scabs; cauliflower ears; nose warts; inflammation of the penis and reddish feces.

A complete change of personality, such as viciousness, is often a dietary deficiency disease which is immediately cured with an increase in protein. Feed heavily on tropical fish food which contains fish meal, shrimp meal and other high proteins. Some scientists report that too much protein also causes viciousness, but this is always accompanied with timidity, so if your rat suddenly becomes timid and shys away from you, leave it alone and change the rats' diet for a few days.

There are hundreds of symptoms known for various de-

If your rat is cut or bitten, use a medicated ointment, such as is used for dogs and cats.

ficiency diseases, but the only thing to do with a sick rat is to destroy it immediately. Call your S.P.C.A. (Society for the Prevention of Cruelty to Animals) or similar organization to remove the sick animal.

Many rats, because of having been inbred for many generations, are subject to hereditary diseases. Some of these diseases are dwarfism, cataracts, lack of gnawing teeth, hairlessness, stubby tail, "waltzing", eyelessness, small eyes, large gnawing teeth, corkscrew tails, missing limbs, etc. If you have a strain that throws off this type of 'monster' discontinue breeding from it.

Perhaps the most common disease of rats is a wheezing which comes from pneumonia or other respiratory ailment. There is a cure, but it is expensive and the drugs require prescriptions. Since this booklet is for pet rats, it is cheaper and more humane to have the rat destroyed, than to try to "experiment" and cure it.

BIRD BOOKS

Qty.	Style No.		Retail Price
	B-103	Finches as Pets	.35
	PR-024	Finches in color	.50
	PS-648	Intro. Finches Sftbld.	$2.00
	PS-652	This is the Finch	$5.95
	PS-631	Foreign Birds	$2.00
	PS-647	Halfmoon	$2.00
	B-104	Java Temple Birds	.35
	PS-633	Mynahs, Guide to	$2.00
	AP-875	Mynah, Pet	$1.00
	B-105	Mynah Birds	.35
	PR-013	Mynah in color	.50
	PS-604	Parakeets, All About	.75
	B-108	Parakeets as Pets	.35
	CH-15	Parrakeet, Live with	$1.00
	B-109	Parakeet, Talking	.35
	B-110	Parakeet, Train Yr.	.35
	M-506	Parrots	$1.00
	H-931	Parrots & Parrotlike	$7.95
	H-912	Parrot and Related	$9.95
	PS-654	All About Parrots	$2.00
	B-106	Parrots as Pets	.35
	AP-1341	Parrots Exclusive	$1.50
	PS-653	This is the Parrot	$5.95
	AP-6450	Pheasant Breeding	$2.95
	M-512	Pigeons	$1.00
	B-107	Pigeons as Pets	.35
	AP-6801	Beginn. with Pigeons	$2.00
	AP-1000	Softbilled Birds	$4.00
	AP-926	Stroud Bird Disease	$8.95
	PS-640	Stroud Dis. of Canaries	$4.95
	PS-629	Waxbill, Weavr, Whyd	$2.00
	B-111	Wild Birds	.35
	AP-6810	Wild Pigeon & Dove	$5.00

DOG BOOKS

Qty.	Style No.		Retail Price
	DS-1045	Affenpinscher	$1.00
	PS-639	Afghan Hound This is	$4.95
	DS-1001	Afghan	$1.00
	D-401	Afghans as Pets	.35
	DS-1002	Airedale	$1.00
	AP-2900	Airedale Terriers	$2.00
	D-402	Airedales as Pets	.35
	DS-1041	Akita	$1.00
	DS-1042	Alaskan Malamute	$1.00
	DS-1046	American Foxhound	$1.00
	DS-1047	Amer. Water Spaniel	$1.00
	DS-1050	Australian Terrier	$1.00
	DS-1051	Basenji	$1.00
	DS-1003	Basset Hound	$1.00
	PS-625	Basset Hound	$4.95
	D-403	Basset Hounds	.35
	AP-2350	Beagle, Pet	$1.50
	PS-609	Beagle, This is the	$4.95
	DS-1004	Beagles	$1.00
	D-404	Beagles as Pets	.35
	DS-1052	Bedlington Terrier	$1.00
	DS-1054	Belgian Sheepdog	$1.00
	DS-1055	Belgian Tervuren	$1.00
	DS-1058	Bloodhound	$1.00
	DS-1060	Border Terrier	$1.00
	DS-1043	Borzoi	$1.00
	DS-1005	Boston Terrier	$1.00
	PS-621	Boston Terrier	$4.95
	D-405	Boston Terriers	.35
	DS-1061	Bouvier d'Flandres	$1.00
	DS-1006	Boxer	$1.00
	PS-610	Boxer, This is the	$4.95
	D-406	Boxers as Pets	.35
	DS-1021	Breed Your Dog	$1.00
	DS-1062	Briard	$1.00
	DS-1063	Brittany Spaniel	$1.00
	DS-1064	Brussels Griffon	$1.00
	DS-1007	Bulldog	$1.00
	D-407	Bulldogs as Pets	.35
	DS-1065	Bullmastiff	$1.00
	DS-1066	Bull Terrier	$1.00
	DS-1068	Cairn Terrier	$1.00
	DS-1067	Cardgn Welsh Corgi	$1.00
	DS-1142	Cavlr. King. Ch. Span.	$1.00
	DS-1069	Ches. Bay Retriever	$1.00
	DS-1008	Chihuahua	$1.00
	AP-3200	Chihuahua, Pet	$1.50
	PS-611	Chihuahua, This is	$4.95
	D-408	Chihuahuas as Pets	.35
	DS-1053	Chinese Crested	$1.00
	DS-1070	Chow Chow	$1.00

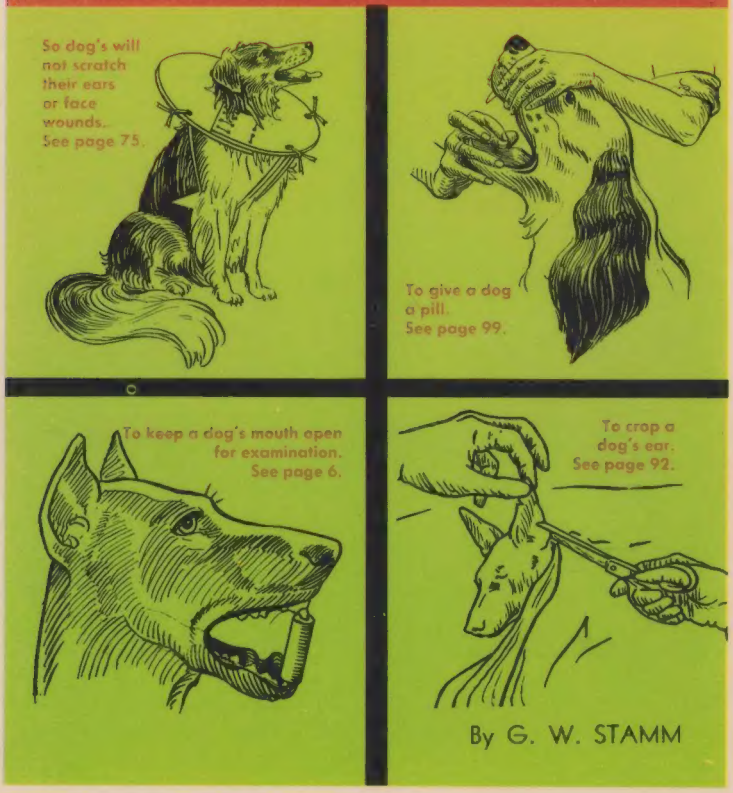
DOG BOOKS

Qty.	Style No.		Retail Price
	DS-1071	Clumber Spaniel	$1.00
	DS-1009	Cocker Spaniel	$1.00
	H-923	Cocker Handbook	$4.95
	PS-612	Cocker, This is the	$4.95
	D-409	Cocker Spaniels	.35
	DS-1010	Collie	$1.00
	PS-619	Collie, This is the	$4.95
	D-410	Collies as Pets	.35
	DS-1057	Coonhound	$1.00
	DS-1072	Curlycoat Retriever	$1.00
	DS-1011	Dachshund	$1.00
	PS-637	Dachshund, This is	$4.95
	D-411	Dachshunds as Pets	.35
	DS-1012	Dalmatian	$1.00
	AP-3650	Dalmatian, Pet	$1.50
	D-412	Dalmatians as Pets	.35
	DS-1134	Dandie Dinmont	$1.00
	PS-605	Distemper Complex	$5.00
	DS-1013	Doberman Pinscher	$1.00
	AP-2690	Doberman Pins, Pet	$1.50
	PS-622	Doberman Pinscher	$4.95
	D-413	Doberman Pinschers	.35
	PS-644	Dog, How To Train	$3.95
	H-927	Dog Breed, Ency. of	$9.95
	H-925	Dog Breeders Handbk.	$4.95
	PR-006	Dog Training in color	.50
	PS-606	Dollars in Dogs	$4.95
	E-710	Easy Way Train Dog	.50
	AP-3550	English Bulldog	$1.50
	DS-1014	English Cocker	$1.00
	D-414	English Cockers	.35
	DS-1074	English Setter	$1.00
	DS-1075	English Toy Spaniel	$1.00
	DS-1022	Feed Your Dog	$1.00
	DS-1015	First Aid Your Dog	$1.00
	DS-1077	Flatcoated Retriever	$1.00
	DS-1137	Flushing Dogs, Hunt	$1.00
	DS-1038	Fox Terrier	$1.00
	AP-3000	Fox Terrier, Pet	$1.50
	PS-613	Fox Terrier	$4.95
	D-415	Fox Terrier	.35
	DS-1127	Fox Terrier, Toy	$1.00
	D-441	Fox Terr, Wirehair	.35
	DS-1078	French Bulldog	$1.00
	D-416	German Pointers	.35
	DS-1017	German Shepherd	$1.00
	PS-614	German Shepherd	$5.95
	D-417	German Shepherd	.35
	PS-643	Ger Shepherd, Puppy	$3.95
	PR-007	Ger Shepherd in color	.50
	DS-1016	Ger Shthrd Pointer	$1.00
	PS-635	Ger Shthrd Pointer	$5.95
	DS-1080	Ger Wirehair Point	$1.00
	DS-1081	Giant Schnauzer	$1.00
	DS-1018	Golden Retriever	$1.00
	D-418	Golden Retrievers	.35
	DS-1082	Gordon Setter	$1.00
	DS-1019	Great Dane	$1.00
	AP-2750	Great Dane, Pet	$1.50
	PS-620	Great Dane, This is	$4.95
	D-419	Great Danes as Pet	.35
	DS-1084	Great Pyrenees	$1.00
	DS-1083	Greyhound	$1.00
	DS-1023	Groom Your Dog	$1.00
	DS-1139	Gundogs, Handbook of	$1.00
	DS-1085	Harrier	$1.00
	DS-1020	Housebreak & Train	$1.00
	DS-1024	Irish Setter	$1.00
	AP-2180	Irish Setter, Pet	$1.50
	D-421	Irish Setters	.35
	DS-1087	Irish Terrier	$1.00
	DS-1088	Irish Water Spaniel	$1.00
	DS-1089	Irish Wolfhound	$1.00
	DS-1086	Italian Greyhound	$1.00
	D-422	Japanese Spaniels	.35
	DS-1090	Japanese Spaniel	$1.00
	DS-1091	Keeshond	$1.00
	DS-1092	Kerry Blue Terrier	$1.00
	DS-1093	Komondor	$1.00
	DS-1094	Kuvasz	$1.00
	DS-1095	Labrador Retriever	$1.00
	DS-1096	Lakeland Terrier	$1.00
	DS-1097	Lhasa Apso	$1.00
	DS-1025	Maltese	$1.00
	D-423	Maltese as Pets	.35
	DS-1098	Manchester Terrier	$1.00
	D-424	Manchester Terrier	.35
	DS-1099	Mastiff	$1.00

DOG BOOKS

Qty.	Style No.		Retail Price
	DS-1039	Miniature Pinscher	$1.00
	D-425	Miniature Pinscher	.35
	DS-1026	Min. Schnauzer	$1.00
	PS-627	Min. Schnauzer	$4.95
	D-426	Min. Schnauzer	.35
	DS-1100	Newfoundland	$1.00
	DS-1101	Norwegian Elkhound	$1.00
	DS-1102	Norwich Terrier	$1.00
	DS-1103	Old Engl. Sheepdog	$1.00
	DS-1104	Otterhound	$1.00
	DS-1105	Papillon	$1.00
	DS-1028	Pekingese	$1.00
	AP-3300	Pekingese, Pet	$1.50
	D-427	Pekingese as Pets	.35
	PS-615	Pekingese, This is	$4.95
	DS-1106	Pembroke Wel. Corgi	$1.00
	DS-1107	Pointer	$1.00
	D-428	Pointers as Pets	.35
	DS-1138	Pointing Dogs, Hunt	$1.00
	DS-1029	Pomeranian	$1.00
	AP-3380	Pomeranian, Pet	$1.50
	PS-634	Pomeranian, This is	$4.95
	D-429	Pomeranians as Pet	.35
	DS-1030	Poodle	$1.00
	H-921	Poodle Clip Book	$4.95
	H-926	Poodle Clip, How to	$3.95
	DS-1040	Poodle, Clip Your	$1.00
	DS-1079	Poodle Clip Chart	
	H-924	Poodle Handbook	$4.95
	PR-014	Poodle in color	.50
	PS-646	Poodle, Puppy	$3.95
	PS-616	Poodle, This is the	$4.95
	PS-641	Poodle, You and Your	$2.95
	D-430	Poodles as Pets	.35
	E-723	Poodles in Your Home	.50
	DS-1031	Pug	$1.00
	AP-3400	Pug, Pet	$1.50
	PS-623	Pug, This is the	$4.95
	D-431	Pugs as Pets	.35
	DS-1108	Pull	$1.00
	D-432	Puppies as Pets	.35
	E-705	Puppy, Charming	.50
	AP-3840	Puppy Dog	.50
	DS-1027	Puppy, Mix Br. Pedgd.	$1.00
	PR-015	Puppy in color	.50
	PS-618	Puppy, This is the	$4.95
	D-433	Retrievers as Pets	.35
	DS-1136	Retrievers, Hunting	$1.00
	DS-1109	Rhodesian Ridgebck.	$1.00
	DS-1110	Rottweiler	$1.00
	DS-1125	Saint Bernard	$1.00
	DS-1112	Saluki	$1.00
	DS-1113	Samoyed	$1.00
	DS-1114	Schipperke	$1.00
	DS-1115	Scottish Deerhound	$1.00
	DS-1032	Scottish Terrier	$1.00
	AP-3160	Scottish Terrier, Pet	$1.50
	PS-626	Scottish Terrier	$4.95
	D-434	Scotties as Pets	.35
	DS-1116	Sealyham Terrier	$1.00
	D-435	Sealyham Terriers	.35
	DS-1033	Shetland Sheepdog	$1.00
	D-436	Shetland Sheepdogs	.35
	DS-1117	Shih Tzu	$1.00
	PS-607	Show Your Own Dog	$4.95
	DS-1118	Siberian Husky	$1.00
	DS-1044	Silky Terrier	$1.00
	DS-1119	Skye Terrier	$1.00
	DS-1120	Softcoat Wheat Ter	$1.00
	DS-1122	Spitz	$1.00
	DS-1034	Springer Spaniel Eng.	$1.00
	D-437	Springer Spaniels	.35
	DS-1123	Staffordshire Terr	$1.00
	DS-1124	Standard Schnauzer	$1.00
	DS-1135	Tibetan Terrier	$1.00
	D-420	Train Your Dog	.35
	AP-927	Veterinarian Guide	$2.95
	DS-1129	Vizsla	$1.00
	DS-1035	Weimaraner	$1.00
	D-438	Weimaraners	.35
	PS-638	Weimaraner, This is	$4.95
	D-439	Welsh Corgies, Pets	.35
	DS-1036	Welsh Terriers	$1.00
	D-440	Welsh Terriers, Pet	.35
	DS-1133	W. Highland White	$1.00
	DS-1131	Whippet	$1.00
	DS-1037	Yorkshire Terrier	$1.00
	D-442	Yorkshire Terriers	.35

Dog Owner's VETERINARY GUIDE


So dog's will not scratch their ears or face wounds.. See page 75.
To give a dog a pill. See page 99.
To keep a dog's mouth open for examination. See page 6.
To crop a dog's ear. See page 92.

By G. W. STAMM

AVAILABLE AT YOUR PETSHOP